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# Playing catch up? An exploration of supplementary work at home among Australian public servants

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## Abstract

Working at home has conventionally been understood as a formal, employer-sanctioned flexibility or 'telework' arrangement adopted primarily to promote work–life balance. However, work at home is now most commonly performed outside of normal working hours on an informal, ad hoc basis, to prepare for or catch up on tasks workers usually perform in the workplace. Scholarly assessment of this type of work has been sparse. To fill this gap, we undertook secondary analysis of a large data set, the Australian Public Service Employee Census, to explore the personal and organisational factors associated with middle-level managers regularly taking work home to perform outside of and in addition to their usual working hours. We conceptualise this as 'supplementary work'. The analysis shows how supplementary work is a flexibility practice associated with high workloads and poor organisational supports for work–life balance, distinguishing it from other forms of home-based work. Whereas previous studies have not found gendered effects, we found women with caring responsibilities had higher odds of performing supplementary work. These findings expand understandings of contemporary flexibility practices and the factors that affect them, and underline the need for more nuanced theories of working at home.

**Keywords**: Flexibility, public sector, work and family, work at home, working time

## Introduction

In wealthy countries, unprecedented numbers of employees perform some of their work tasks at home, a trend driven by the growth of knowledge-based industries, government and organisational policies promoting flexible work, and widespread access to mobile and home-based office technologies. These intertwining developments have generated considerable scholarship concerned with the incidence, experience and impact of working at home or other locations, much of which has shown highly gendered motivations for and experiences of home-based work (Felstead and Jewson, 2000; Golden, 2008; Hilbrecht et al., 2008; Hill et al., 2003; Kurland and Bailey, 1999; Mann and Holdsworth, 2003; Maruyama et al., 2009; Powell and Craig, 2015; Sullivan and Lewis, 2001; Sullivan and Smithson, 2007).

Within these studies of home-based work, the focus has predominantly been on men and women employed in organisations who perform some of their usual paid hours at home as part of flexibility or 'teleworking' arrangements approved by employers (Morganson et al., 2010).1 Arrangements such as working a regular day at home each week, or occasionally working at home to meet personal needs, have usually been understood and defined through assessment of organisational policies and the presence of formal agreements between employees and employers, which seek to enable employees to substitute time usually spent in the workplace for equivalent time spent working at home. In parallel, policy and practice developments have focused on extending industrial rights to formal flexibility, which in Australia and elsewhere have centred on the right to request flexible working arrangements (Cooper and Baird, 2015).

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However, notions of working at home as formalised, employer-sanctioned spatial flexibility offers only a partial picture, obscuring the incidence and nature of work performed remotely, which may also be performed on an informal, ad hoc basis and without formal agreement from employers. In addition to being part of a formal arrangement, working at home may also involve employees preparing for or catching up on tasks before or after their usual time at the office, or keeping up with work while on leave (Australian Bureau of Statistics (ABS), 2016; Fenner and Renn, 2004, 2010; Hesketh and Cooper, 2014; Ojala, 2011; Ojala et al., 2014; Song, 2009). This work may be experienced ambiguously by employees, as mobile technologies make it possible to easily intersperse work and non-work activities. Shifting between work and other activities on mobile devices may mean some activities, like reading or replying to emails, are not consistently recognised as work, even where they disrupt leisure or family activities, contributing to difficulties in capturing and quantifying these activities in research.

However, while the ambiguity of ad hoc, informal or supplementary work at home makes it potentially difficult to capture, the data available suggest it is common. Australian Bureau of Statistics data have shown that the most common reason Australian employees work at home is to catch up on work. While around a third of employees reported regularly working from home, of these, the largest group (42%) cited catching up on work as the main reason (ABS, 2016). There is also evidence of growing managerial expectations that informal out-of-hours work at home will be performed. A 2015 survey of 946 employees in Australia found 54% of workers were expected to work or not discouraged from working at home outside of their work hours, up from 39% just 2 years earlier (Johnson, 2015).

This article more closely examines these informal practices of working at home. Following Fenner and Renn (2010) and Ojala (2011), we conceptualise these practices as 'supplementary' work at home, to distinguish them from other forms of work at home. The concept of supplementary work is useful because it distinguishes this informal work at home from both work at home conducted as a substitute for work in the workplace (e.g. a regular work at home day) and overtime work. While supplementary work could be considered a form of unpaid overtime, we find supplementary work is a more appropriate concept as it captures unpaid work performed away from the office outside of usual ordinary hours. Further, it better reflects the circumstances of professional full-time workers (the focus of our analysis). Those in this group are usually contracted for specified hours but work for fixed salaries with the expectation they will 'get the job done' regardless of time or pay, with little opportunity for paid overtime. Further, although some supplementary work at home may be expected by employers or tacitly approved by supervisors, it is primarily informal, arising from employees' apparent discretion to contribute time in addition to contractually agreed working hours. As such, it tends to sit outside official work-time regulation or labour law (Ojala, 2011).

The impacts of supplementary work at home are also more ambiguous than work done at home as part of a formal flexibility arrangement. Although spatial and schedule flexibility have been understood to have mostly (but not universally) positive impacts on work–life outcomes (Hill et al., 2003; Redman et al., 2009; Sullivan and Lewis, 2001), the specific impacts of supplementary work are less clear. Some research has found it places pressure on the work–family interface, reducing time available for family and leisure and opportunities to disengage and recover from work, impacting negatively on family, leisure and health outcomes (Arlinghaus and Nachreiner, 2014; Fenner and Renn, 2010; Ojala et al., 2014). Others have interpreted supplementary work at home more positively, seeing it as an expression of employee loyalty, autonomy, engagement and career aspiration, leading to future rewards (Taylor, 2016). Song (2009) found that rather than undermining worker well-being, this kind of overtime enabled high-status employees to invest in their careers, making short-term sacrifices for higher future earnings and progression. Taylor (2016) includes

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supplementary work at home alongside other forms of unpaid overtime as organisational citizenship behaviour, with employees using their discretion over work time and space to go 'beyond the call of duty'. She found it was common among employees who considered their work to be meaningful and interesting, and subsequently chose to use non-work time to perform tasks considered important to the work unit or organisation, and enhance prospects for future career success.

Others offer more nuanced interpretations of employees' voluntary contributions of unpaid work, recognising that 'choices' to work from home may reflect constraints such as high workloads, as well as (or instead of) employee self-interest in performing additional tasks (Dockery and Bawa, 2014). Employer provision of laptops or smart phones, for example, may be interpreted to merit reciprocation from employees through long hours and additional work at home, especially where non-work use is allowed or tolerated (Cavazotte et al., 2014). Further, while employees may value opportunities to use technology to stay connected to the workplace, technologies enabling flexible work may also facilitate managerial surveillance and control (Cavazotte et al., 2014). We also acknowledge that even where employees seem to 'choose' or voluntarily 'opt in' to supplementary work, this does not necessarily mean their practices have no ill-effects on family, leisure time or health.

Recognising that the main form of work that Australian employees perform at home is supplementary (ABS, 2016), the article next examines wider research on its prevalence and antecedents. We then more closely examine the personal and organisational factors associated with regularly performing supplementary work at home among a large group of workers: Australian Public Servants. These mostly office-based workers have been traditionally subject to tight work-time regulations, and in a context of managerial reform and austerity face pressures to do 'more with less', making their supplementary work practices of particular interest. Like others who have sought to understand flexible work practices (Bessa and Tomlinson, 2017), we analyse a secondary dataset. While few large employee data sets capture supplementary work, we use the unique opportunity of the Australian Public Service Employee Census to deepen understanding through statistical analysis of which groups of workers report regularly performing supplementary work, and the circumstances under which they do so.

**The prevalence and antecedents of supplementary work at home**

A relatively small body of research has explored supplementary work at home, and although there is no definitive scholarly account, there is some evidence of its prevalence and antecedents in specific national and employment contexts. This research shows that supplementary work at home is common in Australia and elsewhere. Using the Work Schedules and Work at Home supplement to the United States' Current Population Survey, Song (2009) found that as early as 2001, around one in eight workers were taking work home without a formal arrangement to do so, even prior to the widespread take-up of smart phones and wireless internet at home, which have facilitated massive expansion of email and other work tasks at home (Pocock and Skinner 2013). Time diary research showed that in 2004, around 12% of non-agricultural employees in the US did some work at home, with 3% working exclusively at home for the day and a further 9% taking some work home, most frequently to complete or catch up on work (Eldridge and Pabilonia, 2010). More recent studies in the context of Finland's highly knowledge-based economy suggest taking work home may be even more prevalent: 22% of all wage earners were found to perform some unpaid overtime work at home (Ojala et al., 2014). In Australia in 2015, around 18% of employees were estimated to regularly work from home, and for more than half of this group (55%), the main reason was to catch up on work (ABS, 2016). Catching up on work was the reason for working at home given by 49.9% of women participating in the American Time Use Survey 2004, and 40.2% cent of men (Song, 2009;

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Wight and Raley, 2008). This is consistent with Dockery and Bawa's (2014) findings that for many, working at home is a 'necessary evil' for employees seeking to cope with long hours.

Relatively few studies have closely examined the organisational, employment, social and personal factors associated with supplementary work at home. Interestingly, and in contrast to other research on working at home, gender differences in the prevalence of supplementary work at home have been found to be subtle, if they exist at all. Song (2009) found that while women were slightly more likely than men to have formal arrangements with employers to work some paid hours at home, unpaid work at home outside of these arrangements was not subject to gender effects. Similarly, Ojala (2011) found no explicit gender differences in supplementary work at home performed by Finnish wage earners, and instead framed it as the product of factors other than gender, as the sexes performed it at similar rates. This is contrary to other studies of work at home showing that men and women have different motivations for and benefits and challenges in working at home (Hilbrecht et al., 2008; Mann and Holdsworth, 2003; Sullivan and Lewis, 2001; Sullivan and Smithson, 2007). It is also contrary to expectations that women may have higher propensity to work unpaid overtime to meet perceived work expectations, on the basis of feminine ideals of self-sacrifice and service to others (Baines et al., 2012).

Rather than gender per se, family type and care responsibilities have been found to influence supplementary work at home. Song (2009) pointed out that workers with greater need for household productivity, such as those with more children or care responsibilities, may perform work at home to simultaneously maximise their workplace and household productivity. Ojala et al. (2014) found that both informal overtime at home (supplementary work) and formal work at home arrangements were more common among couples with children. However, unlike formal telework, informal overtime at home was not associated with the age of an employee's youngest child. They saw this to reflect preferences of single people to work overtime with colleagues, whereas those with family responsibilities tend to finalise work tasks at home to increase their household presence and multi-task in order to meet work demands.

Other studies of the factors associated with supplementary work at home have focused on the nature of the work tasks, and time and performance cultures in organisations. By its nature, supplementary work at home requires tacit organisational 'permission' to work autonomously and to decide when and where work tasks are performed (Venkatesh and Vitalari, 1992). As it requires a degree of job control and possession of work 'equipment' or technologies, higher-status workers, such as knowledge-based workers with higher levels of education and autonomy, are more likely to perform supplementary work at home (Eldridge and Pabilonia, 2010). Indeed, Nätti et al. (2011) found supplementary work at home was most commonly done by white-collar workers. Similarly, in Australia, managers and professionals have been found more likely to work at home (Dockery and Bawa, 2014). Song (2009) likewise found it was more common among more educated, higher-earning workers and team leaders. Leaders may feel they need to work out of hours to prevent bottlenecks in their teams, while professionals may do it to keep abreast of knowledge or to meet their own high standards or those perceived among clients, employees or students (Ojala, 2011).

As well as levels of discretion, autonomy and control, the creative nature of work tasks may also influence supplementary work. Based on interviews with employees, Ojala (2011) found individuals were more willing to work longer and 'donate' unpaid labour where they performed creative and knowledge-based work with open-ended tasks that they enjoyed, and where performance regimes were based on task completion rather than presenteeism. However, while individual orientation and motivation may promote willingness to control working time practices, negative 'push' factors, such as excessive workload, have also been identified as likely to co-exist with these (Ojala et al., 2014).

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Indeed, while research frames supplementary work as a voluntary practice arising from opportunities for work autonomy, it may also reflect workload pressures and time cultures within organisations. Leaders and peers may shape home-based overtime as an everyday practice required for progression; workplace reform or restructuring may require staff to undertake additional work or learn to adapt; and rationalisation may expand work roles and workloads (Ojala, 2011; Taylor, 2016). In her interviews, Ojala (2011) found highly committed employees worked additional hours at home to compensate employers for disrupted productivity during usual working hours, and to allow themselves to reach their personal goals for work, so they could feel able to switch off and relax. Ojala (2011) also found that high workload, complexity and deadlines predicted supplementary work. Further, competitive workplace cultures and limited opportunities to advance could increase supplementary work at home, as employees see the need to donate time in their efforts to be seen as diligent, high performers in pursuit of promotion or pay rise, or to prevent job loss (Song, 2009).

Overall then, although the body of research is relatively small, supplementary work at home performed outside of and in addition to contractual working hours has been interpreted to arise from a range of organisational and individual characteristics and circumstances, and to differ from formal working at home arrangements. Unlike for other kinds of home-based work, gender has not emerged as a strong predictor. In the remainder of the article, we examine the factors associated with regular supplementary work at home among a large sample of public sector workers. Specifically, we are concerned with which kinds of employees regularly perform supplementary work, and the employment and organisational characteristics that shape whether or not employees perform it. Our approach shows that workload pressures and work intensification appear important predictors of taking work home, supporting the depiction of this form of work at home as a 'catch-up' strategy. This challenges framings of working at home as positive work–life strategies, or as voluntary citizenship behaviour or self-interested investment in future career prospects (Bolino and Turnley, 2003; Taylor, 2016). Further, we find supplementary work is shaped by gender: women with care responsibilities are most likely to perform supplementary work at home. The analysis deepens insight into an increasingly prevalent contemporary flexibility practice by showing the range of factors associated with supplementary work at home, and underlines the need for more nuanced theories of working at home.

## Method

### Data and sample

Data come from the Australian Public Service Employee Census, 2014. These employees comprise a significant proportion of Australia's workforce (1.3%) and are also significant for their role in administering federal government programs, developing and monitoring laws and standards, and managing government finances (Australian Public Service Commission (APSC), 2016). Public servants' work-time arrangements are of particular interest because work time and workloads have traditionally been subject to collective industrial regulation. Yet less is known about these workers' informal work-time practices, and how arrangements are changing in response to heightened departmental, political and citizen expectations of public servants 'going the extra mile' to achieve high standards of performance with diminished resources (Taylor, 2016).

The Australian Public Service Employee Census allows specific examination of public servants' practices of working remotely outside of their usual working hours. While the Census has been used previously to examine overtime practices generally, such as staying late, attending on non-work days or working at home (Taylor, 2016), to our knowledge it has not been analysed with a specific focus on employees' practices of taking work home to perform out of hours. The Employee Census is a

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high-quality data source. It is conducted each year by the APSC and covers all Australian government agencies with at least 100 employees. It is the major source of information on workforce and leadership trends in Australia's public sector and forms the basis for the Commission's annual report to the Australian Parliament, required under the Public Service Act 1999 (APSC, 2014a). We used data collected in 2014, when 99,392 employees provided valid responses to the Census – a response rate of 68% (APSC, 2014a). That year was a period of upheaval in the public service. The Australian Labor Party had lost to the Liberal National Coalition in 2013, which had instituted austerity measures including a 2.5% 'efficiency dividend', placing pressure on productivity and the size of the public service. The Australian Public Service Employee Database shows that retrenchments spiked in 2014, with 6958 job losses across the service (3.6 times more than in 2013).

We limit analysis to full-time staff employed at executive level (EL). By including full-time workers only, we focus on employees for whom taking work home is likely to be most disruptive, on the basis that supplementary work at home is in excess of full-time hours.2 By focusing on EL staff, we focus on middle-level managers in specialist, leadership and supervisory roles, who are likely to have some autonomy over workflows and standards. These staff are positioned above the operational-level 'APS Level 1 to 6' classifications, but below the leaders in the Senior Executive Service (SES), who, on the basis of their seniority, could be expected to be much more likely to do supplementary work away from the office. APS Work Level standards state that EL1 officers are generally required to 'undertake work that is very complex or sensitive' as well as 'exercise a considerable degree of independence and perform a leadership role' (APSC, 2014b). They may engage in complex problem solving, co-ordinate or undertake projects that impact on departmental outcomes, and manage key external relationships and teams. Executive Level 2, officers have higher levels of leadership and strategic responsibility for advising senior managers and ministers (APSC, 2014b). While arrangements differ across agencies, EL1s and EL2s are generally not part of the flexitime systems which enable more junior APS workers to take time off in exchange for working additional hours. Rather, EL staff are paid fixed salaries at levels which assume they perform additional tasks or overtime without additional pay or time off in lieu (Taylor, 2016). Because of broad similarities between EL1 and EL2 responsibilities and their differences from the APS and SES classifications (and because the confidentialised data set combined the two EL levels), we focus on EL1 and EL2 staff as a single group.

To determine the frequency of supplementary work, we examined the question that asked respondents how often they took work from the office to do at home or another location outside of their normal work hours. Of the 16,030 full-time EL staff in the data set, 14,789 respondents answered this question and indicated their gender. Personal and organisational characteristics of the sample are provided with a breakdown by gender in Appendix 1. Most workers in the sample were men (54.8%). Overall, 13.0% of respondents reported regularly doing supplementary work (taking work away from the office to do at home or another location outside of their normal work hours), and the difference in the proportion of men and women who did so (before controlling for potentially confounding factors) was minimal (13.1% and 12.8%, respectively). Most employees in the sample worked in large organisations in the Australian Capital Territory (ACT), were aged between 30 and 60, and were from English-speaking backgrounds. Around 28% had carer responsibilities, defined as responsibility for a child, partner, parent or other family member. A little over 70% of women and men had tertiary degrees, and more than two in three had over 5 years' experience in their agency. Around 60% of respondents felt their workplace culture supported work–life balance, and 66% were satisfied with their ability to access and use flexible work arrangements (with no significant difference between the sexes). More women than men reported that their work group had been affected by structural or functional change in the last 12 months, or by a change in manager or loss of staff.

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**Analysis**

We used logistic regression to examine the odds of regularly performing supplementary work, controlling for a range of employment, organisational and personal factors. The dependent variable was derived from the question 'In the last fortnight, how often did you take work from the office to do at home or another location outside your normal work hours?'. The options of 'every day' or 'most days' were combined to create a dichotomous variable indicating regular 'supplementary work' at home or another location away from the workplace (coded as 1). Those who answered 'once or twice', 'not this fortnight' or that they 'would not normally do this' were combined to create a category of those not regularly doing supplementary work (coded as 0). In the sample, 13.0% of respondents reported regularly doing supplementary work, consisting of 2.8% who said 'every day' and 10.1% who reported 'most days'.3

These figures may be influenced by the wording of the question. Underestimation of the extent of supplementary work at home is likely because the question referred to work done outside of 'normal' work hours rather than referring to 'contractual' hours. Further, data is self-reported, and there were no prompts to explicitly direct respondents to include digital tasks that are commonly performed remotely but that may not be recognised as 'work', such as checking or responding to emails, or undertaking work-related reading. A further potential limitation is that the survey did not ask respondents about their reasons for taking work away from the workplace to perform out of hours, and as such, the individual motivations and the meanings attributed to supplementary work at home are not clearly evident. The question was, however, asked alongside others asking how frequently respondents worked more than their standard number of hours because of task demands, and how often they attended work on days outside their normal work hours, implicitly positioning this kind of remote work as a form of overtime or work spillover.

**Independent and control variables**

Independent variables were constructed to control for gender and caring responsibilities, because gender shapes the interface between home and work, and because those with caring responsibilities may be more inclined to work at home to improve household productivity (Felstead and Jewson, 2000; Song, 2009; Sullivan and Smithson, 2007). Dummy variables were used to distinguish women and men with and without caring responsibilities, with male non-carers as the reference category. We also controlled for age (four categories), whether or not workers were from non-English speaking backgrounds, length of experience in the current agency, and possession of a tertiary-level degree.

On the basis that larger organisations can be expected to provide more supports for work – life balance (Den Dulk and Groeneveld, 2012), whether or not respondents worked for an agency with more than 1000 staff was captured as a dummy variable, as was working in the ACT (coded as 1) compared with other locations (coded as 0).4 Two binary indicators were used to enable exploration of associations between family-friendly workplace initiatives and supplementary work. These indicators were whether or not respondents agreed that their workplace culture supported people to achieve a good work – life balance, and whether or not they were satisfied with their ability to access and use flexible working arrangements (each coded as 1 if they agreed, 0 if not).

Supervisory responsibilities were also captured, as managing and supervising other staff may be associated with supplementary work required to maintain team performance and smooth team processes (Song, 2009). As most EL staff have at least one supervisee, our binary indicator distinguishes whether or not they had performance management responsibility for three or more

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staff, to indicate more substantial supervisory roles. Further, as job control may enable tasks to be rescheduled or detached from place (Ojala et al., 2014), we constructed a binary measure to distinguish between those who said they 'always' or 'often' 'have choice in deciding how I do my work' (coded as 1), and those who selected sometimes, rarely, or never on this item (coded as 0). Because having a responsive, supportive manager might facilitate work – life balance and reduce the imperative to perform supplementary work at home, we included whether or not respondents agreed they had a good immediate supervisor.

As previous research has shown high levels of job engagement among those working unpaid overtime or performing supplementary work at home (Ojala, 2011; Taylor, 2016), we included indicators of work engagement and agency engagement. The measure of work engagement was constructed based on a five-point scale capturing levels of agreement with three statements: 'I enjoy the work in my current job', 'My job gives me opportunities to utilise my skills', and 'My job gives me a feeling of personal accomplishment' (Cronbach's alpha = 0.89). This was reconstructed into a binary indicating high work engagement, with those with a minimum aggregated score of 12 out of a possible 15 considered highly engaged (coded as 1) (64.9 per cent of respondents). A measure of agency engagement enabled exploration of the link between taking work home and 'organisational citizenship' (Taylor, 2016). Respondents' levels of agency engagement were captured according to their agreement (measured on a five-point scale) with a series of statements: 'I feel a strong personal attachment to my agency', 'When someone praises the accomplishments of my agency, it feels like a personal compliment to me', 'I am proud to work in my agency', 'My agency motivates me to help achieve its objectives', 'My agency inspires me to do the best in my job', and 'I would recommend my agency as a good place to work' (Cronbach's alpha = 0.91). Those who had a combined score of 24 or higher out of a possible 30 (30.6%) were considered to have high agency engagement.

Because many public servants experienced various kinds of organisational change in 2014 and because organisational change may generate additional work hours, we included indicators of whether or not in the last 12 months the work unit had experienced structural change (change in division or branch structure), functional change (change in responsibilities), change in manager, change in work priorities or a decrease in staff. As Taylor (2016) pointed out, these kinds of changes in structure and operations require staff to adapt to new systems and processes, which affect work practices, networks and workloads, as employees must make changes to maintain their job performances. Decreases in staffing numbers in the work unit may also contribute to additional work, which employees need to perform remotely and out of hours, if loss of staff compounds the workloads of those remaining.

## Findings

Descriptive statistics provide a bivariate profile of the proportion of respondents with various characteristics who reported regularly doing supplementary work away from the workplace (see Appendix 2). Logistic regression was then used to identify whether gender and care, and other personal, human capital, employment and agency characteristics predicted whether or not employees reported regularly taking work away from the office to perform at home (or another location) outside their normal work hours. Odds ratios were calculated, representing the odds of reporting regular supplementary work, compared with not. The reference group consisted of English-speaking, non-tertiary educated males between 30 and 60, without caring responsibilities and working in large, stable workplaces in the Australian Capital Territory (ACT). The Nagelkerke pseudo R-square (0.17) indicated a good model fit.

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The multivariate model (Table 1) shows that a range of factors predict the odds of employees reporting regular supplementary work. As noted earlier, supplementary work at home has been considered less gendered than other forms of telework, yet our model interacting gender and care indicates that taking work home is more common among female carers. Compared with males without caring responsibilities, women without caring responsibilities were slightly less likely to report regular supplementary work (odds ratio (OR) = 0.9, $p < .05$). However, while men with caring responsibilities had higher odds of supplementary work than non-carer males (OR = 1.2, $p < .05$), female carers had 1.5 times the odds of regularly doing supplementary work. Other personal and human capital factors such as age, having a tertiary-level education and being from a non-English speaking background showed no significant association. However, those who had worked in their agency for over 5 years were significantly less likely to report regular supplementary work.

**Table 1. Odds ratios, employees who regularly took work home to do outside usual working hours**

| | Odds ratios | Standard error |
|---|---|---|
| **Personal factors** | | |
| Female (no caring responsibilities) | 0.9* | 0.07 |
| Male with caring responsibilities | 1.2* | 0.08 |
| Female with caring responsibilities | 1.5*** | 0.08 |
| Aged under 30 | 1.1 | 0.14 |
| Aged under 60 | 0.8^ | 0.13 |
| From non-English speaking background | 0.9 | 0.08 |
| **Human capital factors** | | |
| Has a tertiary degree | 1.0 | 0.06 |
| Less than 1 year in agency | 0.9 | 0.12 |
| More than 5 years in agency | 0.8*** | 0.06 |
| **Engagement factors** | | |
| High work engagement | 1.5*** | 0.07 |
| High agency engagement | 1.5*** | 0.06 |
| **Departmental factors** | | |
| Located outside the ACT | 1.2*** | 0.06 |
| Agency has <1000 staff | 1.3*** | 0.08 |
| Agrees that 'workplace culture supports people to achieve a good work-life balance' | 0.7*** | 0.06 |
| Satisfied with ability to access and use flexible work arrangements | 0.7*** | 0.06 |
| **Change factors** | | |
| Workgroup was impacted by structural change in last 12 months (change in division or branch structure) | 1.0 | 0.07 |
| Workgroup was impacted by functional change in last 12 months (e.g. change in responsibilities) | 1.1 | 0.06 |
| Workgroup impacted by change in priorities in last 12 months | 1.5*** | 0.06 |
| Workgroup impact by decrease in staffing numbers in last 12 months | 1.0 | 0.06 |
| Had a change of manager in last 12 months | 1.0 | 0.06 |
| **Work organisation factors** | | |
| Job control (Always or often has choice in deciding how to do work, as opposed to sometimes, rarely or never) | 1.1* | 0.06 |
| Rates work as 'above my classification level' | 2.0*** | 0.08 |
| Manages three or more staff | 2.0*** | 0.06 |
| Has a good immediate supervisor | 0.9^ | 0.07 |
| Always or often has unrealistic time pressures | 3.0*** | 0.06 |
| **Constant** | 0.7*** | 0.12 |

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Consistent with previous research, both high work engagement and high agency engagement had positive, independent associations with the dependent variable. Each raised the odds of regularly doing supplementary work by 1.5 times ($p < .001$). Departmental factors also emerged as important, with respondents from smaller agencies and those working outside the ACT having higher odds of reporting regular supplementary work. Interestingly, satisfaction with flexibility arrangements decreased the odds of respondents reporting regularly doing supplementary work; those who agreed their workplace culture supported work – life balance had lower odds of regularly doing supplementary work (OR = 0.7, $p < .001$). Satisfaction with flexible working arrangements had the same effect (OR = 0.7, $p < .001$), suggesting that unlike other kinds of home-based work, supplementary work at home reflects work spill over.

Structural, functional and managerial changes affecting the workgroup had no significant impact on the odds of doing supplementary work. Nor did decreases in staffing numbers. However, those who reported that their workgroup was impacted by changes in priorities in the last year had 1.5 times higher odds of reporting they regularly perform supplementary work, perhaps reflecting the overflow of work involved in adjusting to new strategic goals. While job control had a small positive association with supplementary work, the effect was much lower than for other elements of work organisation. Those working above their classification level had double the odds of reporting they regularly performed supplementary work, while employees who felt they always or often faced unrealistic time pressures had triple the odds. Staff with supervisory responsibilities for three or more staff had twice the odds of regularly doing supplementary work, perhaps reflecting managers' propensity to work at home outside of their usual hours to maintain the workflows of their teams. Time pressure, under-classification and changing priorities, which each suggest workload pressure, predicted regularly taking work home to perform out of hours.

## Concluding discussion

The analysis contributes empirical data, based on a survey of Australian public servants, to a developing body of literature on supplementary work. This is important to building knowledge of the nature of contemporary work flexibilities, and more nuanced theories of working at home. The analysis has identified a range of individual, job and organisational factors associated with work performed remotely to supplement usual workplace hours and tasks, showing how supplementary work is associated with workload pressure and spillover. Whereas work at home may also be undertaken as part of a formal flexibility arrangement, 13% of these EL public servants regularly took work home to do outside of their usual hours, driven by time pressure, and by work complexity, indicated in the higher ORs among those who reported working above their classified level. Rather than being used as an arrangement that clearly achieves work – life balance, doing supplementary work at home reflects long hours, workload pressures and constrained alternatives in organisations (Dockery and Bawa, 2014). Indeed, public servants' reports of regularly doing supplementary work at home were independently associated both with their perceptions that organisational supports for work – life balance were inadequate, and with lower levels of satisfaction with their ability to access and use flexible working arrangements. Causality is not completely clear however, because while employees may do supplementary work in response to inadequate organisational supports, the pressure of remote working on employees' non-work lives may also heighten awareness of inadequate organisational supports for work – life balance. Either way, for these public servants the flexibility to do additional work away from the workplace does not appear universally positive, demonstrating the ways employees may adjust their non-work lives to accommodate unsustainable expectations of work quantity and performance.

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However, while the analysis most strongly suggests that supplementary work at home is a form of work overload and spillover, the findings are nuanced and suggest this interpretation may co-exist alongside others. As suggested by Taylor (2016), we found some evidence that doing supplementary work may reflect employees' investments in future career status or organisational citizenship, reflected in its higher prevalence during employees' first 5 years in an agency. While regular supplementary work was no more prevalent among those in their first year in their agency, those with more than 5 years of services had lower odds of performing it, after controlling for other factors. The perceived need to invest in one's future career in the agency may diminish with additional years of service. Newer, ambitious recruits may feel more pressure to make positive impressions on superiors, and may use remote, out-of-hours working as a way to 'get the job done' and achieve this. Alternatively, those in more advanced stages of their careers may have levels of productivity such that supplementary work is not required. Further research should explore the links between early and later career experiences and motivations for various supplementary work practices, and workers' own accounts of performing it across the life-course and throughout their careers.

Importantly, for these public servants, gender does appear to shape supplementary work at home. While previous research has found it to be performed at similar rates by men and women, our model, which interacted gender and care, showed that women who care for children or others were most likely to do supplementary work out of hours. Men and women's decision making and personal narratives relating to when and where they perform their work, and their reasons for supplementing tasks performed in the workplace with additional work at home, is worthy of further research. While undertaking supplementary work may enhance productivity among women with care responsibilities, performing additional work at home may also reflect self-sacrificing behaviours through which women workers give up their non-work time to maximise their contributions to their work units and to clients and the public, or compensate employers for enabling their participation in both work and care domains.

Recognising the prevalence of supplementary work at home and the factors that affect it can help build richer, more nuanced understandings of work at home as a contemporary flexibility practice and the complex power relations which lie beneath these practices. Findings indicate how supplementary work at home is driven by productivity needs, and is better depicted as a strategy for 'catching up' or 'keeping up' with work in contexts of high expectations of performance, rather than a strategy for work – family balance. While supplementary work at home reflects risks for the quality of work and family life, it is likely to be particularly difficult to monitor and regulate, falling outside of the formal flexibility policies of organisations, and outside the usual scope of workplace health and negotiations over pay and conditions.

While these conclusions arise from analysis of a large – scale, high-quality data set, the cross-sectional design and reliance on employees' subjective and retrospective reports are potential limitations. Survey question wording may have been interpreted in various ways by respondents, depending on local norms. In particular, the use of personal technologies for both work and non-work tasks may make it difficult for employees to recognise some forms of work at home, and the Census did not prompt respondents about what kinds of tasks or activities they should include. Further, while the dataset captured rich workplace, management and leadership information, it contained few measures of family composition and characteristics, job security, job tasks or personal confidence with technology, factors that may also shape remote working out of hours and employees' self-reflections on their practices. The ways that family factors in particular may shape employees' work-time arrangements, and the impacts of supplementary work at home on family life, are worthy of additional research. Further, it should be recognised that temporal and spatial

cultures and access to flexible work practices are shaped by industry, and our analysis is based on a fairly homogeneous group: middle-level managers in the Australian Public Service. Further research should explore the drivers of supplementary work at home among employees in other contexts, including those at the upper and lower echelons of organisational hierarchies. Finally, the data was captured at a time of upheaval in the Australian Public Service. Tracking trends in supplementary work over time would better show its links to changes in organisations and workloads, and to individual practices and insecurities associated with periods of austerity.

### Notes

[1] Another stream of research into home-based work has focused on home-based self-employment or small business operation; however, here we are concerned with work performed at home for employers.

[2] Part-time workers who take work home to perform outside of their usual hours are excluded, although their practices are worthy of further, separate, research. Note also that the available APSC data set combined categories of 'part-time' and 'casual' so we could not adequately examine part-time work.

[3] The numbers do not add to 13.0 per cent due to rounding. Note also that this figure for full time Executive Level 1 and 2 staff was higher than for full time junior level APS staff (3.4 per cent), but much less than Senior Executive Staff, 34.8 per cent of whom said they regularly took work home to do outside their usual working hours.

[4] Commute times and local labour markets in other capital cities may influence working at home, and those in the ACT may be subject to additional time pressures resulting from attending to demands of government Ministers and parliamentary process.

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**Appendices available on request**